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## NUCLEIC ACID MOLECULES ENCODING RED AND GREEN EMITTING LUCIFERASES

## ABSTRACT OF THE DISCLOSURE

Isolated nucleic acid molecules which code for luciferases able to produce the green bioluminescence of *Phrixotrhix vivianii* and red bioluminescence of *Phrixothrix hirtus* are described. The nucleic acid molecules and the luciferases encoded thereby can be used in applications such as diagnostic methods and molecular biology tools.